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SECTION 900.00 – QUALIFIED PRODUCTS LIST (QPL) PROGRAM SECTION 910.00 – PROGRAM OVERVIEW

The Division of Highways has established a Qualified Products List (QPL) program to formalize the process for the use of pre-qualified products on ITD highway projects and to create a process for specifying a sole source of supply in accordance with federal requirements.

910.01 Product Review Committee (PRC). A Product Review Committee (PRC) has been established by the Division of Highways. The Committee is chaired by the Assistant Chief Engineers and includes representatives from the Bridge, Construction, Highway Operations & Safety, Materials, and Roadway Design sections, as well as the FHWA Division Office. Representatives of other headquarters sections may be added in the future if appropriate. The QPL Program Administrator shall be assigned to the Materials Section.

910.01.01 Administration of QPL Program. The PRC shall administer the Department's QPL; including determining which sub categories of proprietary products shall be covered by the QPL program. For covered categories, applications submitted by manufacturers, vendors or contractors shall be submitted to the QPL Program Administrator for assignment to a Product Review Team for evaluation. Product Review Teams shall be established based on subject matter expertise. The PRC shall make the final determination on 1) definitions of categories and sub categories, 2) use restrictions applied to each sub category, 3) evaluating submitted applications, 4) determining an appropriate level of approval (Approved, Provisionally Approved, or Disapproved), and 5) determining any product specific restrictions based on recommendations of the Product Review Teams.

910.01.02 Dissemination of QPL. Lists of pre-qualified products shall be disseminated via the Department's official web site to department staff, materials suppliers, manufacturers, consultants and contractors.

910.01.03 Sole Source of Supply. The PRC will also pursue approvals of "findings in the public interest" proposed by a Product Review Team or other Department personnel to specify a sole source of supply. Approval of such "findings in the public interest" must be obtained from the FHWA Division Administrator as provided in Title 23 CFR Part 635, Subpart D prior to incorporating sole sources of supply into federal-aid projects.

910.02 QPL Program Administrator. The QPL Program Administrator position is responsible coordination of Product Review Committee activities, identification of necessary Specification changes and development of Departmental protocols. Principal duties include: 1) conducting initial reviews of product submittals, 2) determining appropriate classification of the product, and 3) assigning the application to the appropriate Product Review Team. The Program Administrator is also responsible for maintaining the QPL database in a manner consistent with the requirements of the program users and maintaining the Department's QPL Web Page including the development of required scenarios and criteria for interfacing data from the QPL database to the QPL website.

910.03 Product Review Teams. The Product Review Teams are chaired by subject matter experts from the various Sections of the Department. Section Supervisors shall provide appropriate time and support to accomplish all reviews in a timely manner.

910.03.01 Team Responsibilities. The Review Teams are responsible for making recommendations on the following:

- 1. Definitions of categories and sub categories,
- 2. Use restrictions applied to each sub category,
- 3. Classification of products,

- 4. Appropriate level of approval (Approved, Provisionally Approved, or Disapproved,
- 5. Any restrictions specific to a particular product), and
- 6. Evaluation and reporting protocols for products accepted under a Provisional Approval.

910.03.02 Team Membership. The chairmanships of the Product Review Teams are determined based on the responsibility that the Sections have relative to particular types of products. Assignment of Team Chairs is requested from the appropriate Section Head by the Program Administrator. The Review Teams consist of one or more members, depending on the nature of the products they review. Current Product Review Teams are listed in Table 910.03.1 below, with the Section responsible for assignment of the Team Chair shown.

Table 910.03.1 – Product Review Teams

Review Team	Team Chair	Team Description		
Asphalt Additives	Materials	Responsible for review of proposed anti-stripping additives.		
Barrier Systems	Roadway Design	Responsible for review of permanent and temporary guard rail items including metal, concrete and plastic rail; posts; end treatments; and miscellaneous hardware.		
Break-away Devices	Highway Operations & Safety	Responsible for review of breakaway devices and systems associated with traffic signal poles, light poles and signposts.		
Coatings	Materials	Responsible for review of paint systems for concrete, steel and anti-graffiti; metal protective coating systems (galvanizing, epoxy, etc.); and concrete waterproofing and sealer systems, including penetrating concrete deck sealers.		
Concrete Admixtures	Materials	Responsible for review of chemical admixtures used for concrete and mortars. These products include: air entraining agents, water reducers, super plasticizers, retarders, and accelerators.		
Erosion And Sediment Control – Long Term	Materials	Responsible for review of products used to implement long term and permanent forms of erosion and sediment control. These can include reusable products used during maintenance and construction as well as permanent structures that become a part of the project.		
Erosion And Sediment Control – Temporary & Vegetative	Highway Operations & Safety	Responsible for review of natural environmental products used for blanketing, channel liners, dust control, fertilizers & additives, landscaping materials, mulch, sediment control, tackifiers, vegetation and wetland reconstruction.		
Expansion Joints / Joint Sealers	Bridge	Responsible for review of asphalt plug joints, compression seals and strip seals used in expansion and construction joints.		
Glare Screen	Roadway Design	Responsible for review of glare screen products.		
Hydraulics	Roadway Design	Responsible for review of products used for the transport, management and control of water, including culvert liners.		
Illumination / Electrical	Highway Operations & Safety	Responsible for review of Illumination products, including luminaries, control equipment, poles and miscellaneous equipment.		
MSE Products	Materials	Responsible for review of large block, segmental concrete block, concrete panel, segmental T-wall and welded wire facing retaining wall systems.		
Pavement Geosynthetic	Materials	Responsible for review of pavement rehabilitation products including pavement reinforcement grids, hybrid paving fabrics, interlayer stress absorbing composites, and other proprietary fabric systems.		
Pavement Markings	Materials	Responsible for review of temporary and permanent striping tape; epoxy, methyl methacrylate, and thermo plastic pavement markings; traffic paint and glass beads; and retro-reflectometer testing of pavement markings.		

Table 910.03.1 – Product Review Teams (cont.)

Pavement Patching Materials	Materials	Responsible for review of products used in the repair and patching of asphalt and concrete pavements.		
Pavement Reinforcement	Materials	Responsible for the review of miscellaneous pavement reinforcement products, such as coated, non-corosive or fiberglass dowel bars, tie bars, baskets, chairs, etc		
Piling & Accessories	Materials	Responsible for review of pile tips and pile splicers.		
Polymer Concrete Bridge Deck Thin Overlay	Materials	Responsible for review of products used in the placement o bridge deck thin overlay systems.		
Raised and Detectable Pavement Markers	Highway Operations & Safety	Responsible for review of non-reflective, reflective, and snow plowable raised pavement markers as well as ADA compliant detectable pavement markers for pedestrian areas.		
Soil Reinforcement & Roadway Support Geosynthetics	Materials	Responsible for review of products added to stabilize and/or separate subgrades, subbases, andbases; including geotextiles and geogrids.		
Snow & Ice Control	Materials	Responsible for review of chemical products used in anti- icing and deicing operations.		
Structural Materials & Components	Materials	Responsible for review of miscellaneous structural materials and components, such as metal, plastic or fiberglass products used in or associated with steel or concrete structures.		
Traffic Control Signs & Temporary Devices	Highway Operations & Safety	Responsible for review of temporary and permanent traffic signs, signing materials and retro-reflectometer testing of signs. Also responsible for review of all temporary traffic control devices used in road construction projects. Products include portable trailer mounted changeable message signs; portable trailer mounted traffic signals; portable trailer mounted illumination units; and temporary traffic cones, delineators, drums and barricades.		
Traffic Signals	Highway Operations & Safety	Responsible for review of traffic signal equipment and traffic loop sealers.		
Truck Mounted Attenuators	Highway Operations & Safety	Responsible for review of attenuators designed for mounting on maintenance equipment for the protection of crews involved in moving operations.		
Variable Message Signs - Permanent	Highway Operations & Safety	Responsible for the review of variable message signs permanently installed as a component of an intelligent transportation system (ITS).		
Waterproof Membranes	Materials	Responsible for review of waterproofing membrane systems composed of asphalt, rubber, fiberglass or vinyl.		

SECTION 920.00 - SUBMITTAL OF APPLICATIONS

920.01 Application Submittal Process. All products that fall within a sub category included on the Department's QPL must be on the QPL to be considered for use on a project. Whereas, most product review applications are submitted directly to the QPL Office by the manufacturer or vendor, requests by contractors for the use of products not currently on the list must be submitted through the appropriate Resident Engineer; either by the contractor, or on their behalf by a manufacturer or vendor. An expedited review process is followed for project related applications to ensure a timely response. All applications shall be entered into the database upon receipt to initiate the review and evaluation process.

920.01.01 Applications Submitted by Manufacturer or Vendor. Manufacturers or vendors wishing to have products which fall into a sub category covered by the Department's QPL considered for use by the Department must submit a complete application package to the Department's QPL Office. For expediency, a duplicate package can be sent to the appropriate Product Review Team based on the team responsibilities described on the QPL web site. Applications will be processed in the order they are received. The length of time it takes to complete the review will be partially dependent on the completeness of the applications.

920.01.02 Applications Submitted by Contractors. Requests by contractors to substitute for materials which are covered by the Department's QPL Program shall be submitted on the Department's Product Review Application via the Resident Engineer in accordance with the established QPL Program policies and procedures. The Resident then forwards the application to the QPL Office for processing. Once the complete package is forwarded, an expedited review process will be followed to ensure that a decision is rendered by the PRC within the allowed minimum of 7 working days. If the package is found to be incomplete, the clock will stop until the contractor submits the requested additional information.

920.02 Application Updates. Applications may require updates for a number of reasons. If a product trade name; or the manufacturer's name or other identifying data changes, then an updated application must be submitted by the manufacturer to ensure that the information shown on the QPL is accurate and current. Also, if for marketing reasons, the features claimed for a product are revised, then an updated application must also be submitted so that the information shown on the Department's web site can be accurately updated.

If any changes are made to the actual product (formula, composition, specifications, etc.), then a complete new application must be submitted to the Department with all required supporting documents in accordance with Section 920.01. Failure by the manufacturer to meet this requirement will result in disqualification of the product and removal from the QPL.

If, however; only secondary information, such as the name of vendor or product representative changes, or their contact information changes, an e-mail or telephone contact is sufficient to ensure that the Department's database contains current information.

920.03 Applications. The Application Form, shown in Figure 920.03.1, may be downloaded in either **Word 7.0** or **Adobe® Acrobat**TM (.pdf) format from the Department's QPL web page. The application form requests information on the product, manufacturer and vendor. A complete package includes not only the application form itself, but also all required backup material.

920.03.01 On-line Applications. In order to expedite the input of data submitted on the application, as well as facilitating the sharing of information within the Department, all applications **must** be submitted electronically. This will expedite the review process. To the extent possible, all supporting material should be submitted in **Adobe® Acrobat**TM (.pdf) format. They can either be submitted separately on either a CD or DVD, or they can be submitted via e-mail. If the required supporting material or any required samples must be mailed, a hard copy of the application must also accompany them.

The **Word 7.0** version of the form can be filled out on-screen and e-mailed back to newproducts@itd.idaho.gov. The form will expand as necessary to allow the applicant to supply complete information. The completed **Word** document must be saved first, then inserted into the e-mail.

If the Adobe@ $Acrobat^{TM}$ (.pdf) format is chosen, the form can also be completed on-screen. Rather than the boxes expanding on the form, the box will scroll. Instructions are included on the form for saving and e-mailing the information. Only the data contained on the form is attached to the e-mail rather than the form itself.

920.03.02 Supporting Documents. Depending on the nature of the product, the supporting documents must include: letters of approval from other State DOT's when available, laboratory reports from independent laboratorys that support any technical claims made. MSDS sheets, technical data sheets, FHWA letters of approval, warrantees, etc. are also extremely helpful in fully evaluating a product. Where applicable, video clips of test results should also be submitted.

Figure 920.03.1 – Product Review Application Form

Idaho Transportation Department Product Review Application Updated: 9 June 2006

Product Information	Note: Place "X" in boxes where applicable when the answer is yes.				
Trade Name:	Date Submitted:				
1. Product Identification:					
Patented: Applied for:					
Primary Application:					
Alternate Application:					
Third Application:					
General composition of material:					
Note: Submit applicable laboratory reports					
2. List any specifications met by the product:					
AASHTO ASTM	Federal Specification Idaho Specification				
Note: Certified lab reports must be submitted by mail which support all claims made.					
Outstanding Features or Advantages Claimed:					
Material Specifications furnished by Manufacturer: Comments:					
Definition of the fundaments of the fundament o					
6. Demonstration can be provided:					
7. Instructions or directions for installation, application, or use are furnished by Manufacturer:					
Educational courses or videos can be provided:					
8. Availability: Days after order received for delivery at site:					
Delivery Comments:					
Quantities are Comments:					
9. Free samples will be furnished for evaluation Comments:					
10. Has this product been evaluated by an AASHTO NTPEP Product Panel?	yes, which panel?				
11. List other highway authorities which have approved this					
product for use and whether use is routine or experimental:					
Note: Submit copies of letters of approval from at least two states that are using your product, preferably with similar climate conditions if possible.					

Idaho Transportation Department Product Review Application Updated: 9 June 2006

Product Information (continued)	Note: Place "X" in boxes where applicable when the answer is yes.
12. Alternate for what existing product?	
13. When introduced on the market?	
14. Product is Guaranteed: Note: If yes, submit by mail copies of all applicable warranties.	
Conditions:	
15. Who recommended that the Transportation Department be contacted?	
16. List all offices within the Transportation Department that have been contacted:	
Office Person C	ontacted
17. Additional Information:	
18. Person furnishing information:	Title:
	Title.
	hone: E-mail Address
Organization	
Organization F Manufacturer Information	hone: E-mail Address
Manufacturer Information Manufacturer: Phone: Street Address: City:	hone: E-mail Address Fax:
Manufacturer Information Manufacturer: Phone: Street Address: City:	hone: E-mail Address Fax: Zip:
Manufacturer Information Manufacturer: Phone: Street Address: City: E-mail Address Background description of company and	hone: E-mail Address Fax: Zip:
Manufacturer Information Manufacturer: Phone: Street Address: City: E-mail Address Background description of company and	hone: E-mail Address Fax: Zip:
Manufacturer Information Manufacturer: Phone: Street Address: City: E-mail Address Background description of company and its product:	hone: E-mail Address Fax: Zip:
Manufacturer Information Manufacturer: Phone: Street Address: City: E-mail Address Background description of company and its product: Manufacturer's Representative and/or Vendor Information	hone: E-mail Address Fax: Zip: Web Page
Manufacturer Information Manufacturer: Phone: Street Address: City: E-mail Address Background description of company and its product: Manufacturer's Representative and/or Vendor Information Representative/Vendor: Phone:	hone: E-mail Address Fax: Zip:
Manufacturer Information Manufacturer: Phone: Street Address: City: E-mail Address Background description of company and its product: Manufacturer's Representative and/or Vendor Information Representative/Vendor: Phone: Agent: Title:	hone: E-mail Address Fax: Zip: Web Page Fax: Fax: Fax: Fax: Fax: Fax: Fax: Fax:
Manufacturer Information Manufacturer: Phone: Street Address: City: E-mail Address Background description of company and its product: Manufacturer's Representative and/or Vendor Information Representative/Vendor: Phone: Agent: Title: Street Address: City: City: Title: Street Address: City: Product: Phone: Phone	hone: E-mail Address Fax: Zip: Web Page

IDAHO TRANSPORTATION DEPARTMENT PRODUCT REVIEW APPLICATION [Data Entry Instructions]

PRODUCT INFORMATION

Trade Name: Include the model number of the specific project when

applicable.

Date: Date form is submitted.

1. Product Identification: Dimension, color, formulation, etc. that

further identifies or defines the product.

Patented: Check if the product is currently patented. **Applied for:** Date application was submitted.

Primary Application: Primary intended use of product. Alternate Application: Principal alternate use of product. Third Application: Additional alternative use of product. General composition of the material: self-explanatory.

List any specifications met by product: List applicable numbers under the appropriate category. Submit copies of certified lab reports by mail.

3. Outstanding features or advantages claimed: self-explanatory.

4. Material Specifications furnished by Mfr.: check if furnished. **Comments:** self-explanatory.

5. Plan, drawing, picture or sketch furnished by Mfr.: check if

urnished.

Comments: self-explanatory.

6. Demonstration can be provided: check if available.

Comments: Discuss requirements or limitations.

 Instructions or directions for installation, application or use are available: check if available.

Comments: Nature of instructions or directions (manual, technical notes, instruction sheet, etc.).

Educational courses or movies can be provided: check if available

8. Availability: Seasonal or Non-seasonal.

Days after order received for delivery at site: Number of days.

Delivery Comments: List any additional factors affecting delivery.

Quantities are limited: check if limited.

Comments: Discuss any additional factors related to availability.

9. Free samples will be furnished for evaluation: check if true. **Comments:** Discuss any limitations or restrictions on samples.

10. Has this product been evaluated by an AASHTO NTPEP Product Panel? Check if true.

If yes, which panel: self-explanatory.

11. List other highway authorities which have approved product for use and whether use is routine or experimental: Submit copies of letters of approval from at least two states that are using this product, preferably with similar climatic conditions.

12. Alternate for what existing product: be specific.

13. When introduced on market? Specify date this product introduced.

14. Product is guaranteed: check if true

Conditions: Specify conditions of warranty.

15. Who recommended that the Transportation Department be

contacted? Specify name and agency or company.

16. List all offices within the Transportation Department which have

been contacted:
Office: self explanate

Office: self-explanatory.

Person contacted: self-explanatory.

17. Additional Information: self-explanatory.

18. Person furnishing information: self-explanatory.

Title: self-explanatory

Organization: self-explanatory. **Phone:** self-explanatory.

E-mail Address: self-explanatory.

MANUFACTURER INFORMATION

Manufacturer: Name of company manufacturing the product.

Phone: self-explanatory.

Fax: self-explanatory.

Street Address: self-explanatory.

City: self-explanatory.

State: self-explanatory. **Zip:** postal zip code.

E-mail Address: self-explanatory. Web Page: self-explanatory.

Background description of company: Discuss history of business, when organized, general range of products developed, etc.

MANUFACTURER'S REPRESENTATIVE AND/OR VENDOR INFORMATION

Representative/Vendor: In the case where product is represented directly by Manufacturer, list name of Manufacturer only if address of representative is same as that shown for Manufacturer above; otherwise, list name of the agent representing the Manufacturer. If the product is represented by an independent vendor, either an individual or a company, list the name of independent vendor.

Phone: self-explanatory. **Fax:** self-explanatory.

Agent: Name of Agent Representing Product (Can be an employee of Manufacturer or Vendor; or may be the same as

"Representative" above).

Title: self-explanatory.

Street Address: self-explanatory.

City: self-explanatory.

State: self-explanatory. **Zip:** postal zip code.

E-mail Address: self-explanatory. Web Page: self-explanatory.

NOTE: This form will be used to enter the data in the Department's computerized database and assign it to the proper sub category. A separate form is <u>required</u> for each product or model of the product. Please ensure that all data provided is accurate and complete. If you are filling out more than one form (required for multiple products), ensure that the spelling and abbreviations of persons and companies is consistent.

Please mail form and accompanying documents and/or samples to:

Idaho Transportation Department Attn: QPL Program Admin., Materials Section PO Box 7129 Boise, ID 83707-1129

or deliver to:

Idaho Transportation Department Attn: QPL Program Admin., Materials Section Operations Annex 3293 W. Jordan Street Boise, ID 83702

or e-mail to:

newproducts@itd.idaho.gov

Phone: 208-334-8267, FAX: 208-334-4411

SECTION 930.00 – REVIEW AND EVALUATION PROCESS FOR INITIAL APPLICATIONS

930.01 Review Process. All products that fall within a sub category included on the Department's Qualified Products List (QPL) are reviewed and evaluated under the oversight of The Product Review Committee (PRC). The applications are screened by the Program Administrator in the Materials Section to determine if they are covered by the QPL and then assigned to one or more Sub Categories. These Sub Categories are grouped by Category. Definitions and applicable restrictions are listed under the appropriate Sub Category. Based on the Sub Category, the appropriate Product Review Team(s) will be notified that an application is ready for review. The Product Review Data Base will be updated to include the information contained in the application.

930.01.01 Database. A relational database is maintained on the Department's internet server to organize and track manufacturer, vendor, product, and process information. It is linked directly to the QPL website so that updates made to the database are reflected within 24 hours on the website. Changes to the structure of the database must be coordinated with the Department's Information Services Section.

930.01.02 Classification of Products. The product data contained on the product application as well as supporting materials is reviewed to determine which sub category or sub categories to which the product should be assigned. A separate evaluation is conducted for each sub category to which the product is assigned. It is possible that as additional sub categories are approved for inclusion under the QPL Program, a product may be classified under additional sub categories at a later date.

930.01.03 Assignment to Review Team. Based on the sub categories under which a product is classified, the product application information is made available to one or more Review Teams for evaluation and recommendation. A Product Review Team Recommendation Form will be completed by the Product Review Team.

930.02 Evaluation Process for Manufacturer and Vendor Initiated Applications. The evaluation process is a two-step process.

930.02.01 Response Time. For standard applications which do not require extensive laboratory or field testing, the target evaluation time is 60 days. This allows time for data entry, classification of the product, evaluation by the Review Team, and the final determination to be made by the Product Review Committee. If at any time it is determined that additional information is needed from the applicant, the clock will stop and the evaluation will be put on hold.

930.02.02. Review Team Responsibilities. The review team evaluates the application on the basis of a number of criteria, including:

Meets ITD Standard Specifications,

Has been successfully used by ITD in the past,

Has been successfully demonstrated under field conditions,

Has been approved for use by other State DOT's,

Meets FHWA requirements (e.g. NCHRP 350),

Positive results have been demonstrated under AASHTO's National Transportation Product Evaluation Program (NTPEP), or

Positive results submitted from an "independent" laboratory.

The Team will recommend one of three options to the PRC: Approval, Provisional Approval or Denial. If required, they will contact the applicant directly to obtain additional information or request material

samples or a demonstration. Upon completion of the evaluation, the Review Team Chair will complete the Product Review Team Recommendation Form and notify the Program Administrator.

Note: For project related reviews, the Product Review Team will have five working days to complete their evaluation and forward their recommendation, see Section 930.03.

930.02.03 PRC Responsibilities. Based upon the recommendation of the Product Review Team, the PRC will either take direct action to endorse the recommendation, or at their discretion, may table action to conduct further research on the matter.

930.02.04 Program Administrator Responsibilities. The Program Administrator will track the progress of the evaluation and will help facilitate the orderly handling of each application. Upon final action by the PRC, the Program Administrator will notify the applicant by letter of the PRC's decision. Concurrently, the QPL database will be updated to reflect the decision.

930.03 Evaluation Process for Contractor Initiated Applications. When a Contractor initiates an application in order to substitute a product not already listed under a category covered by the QPL program, the application must be submitted to the Resident Engineer.

930.03.01 Response Time. In accordance with the Standard Specification, a response will be provided within 7 working days. If it is determined the application is incomplete, review time will stop until the required information is received. If the nature of the product precludes an adequate evaluation within the 7-day period, the proposed substitution will not be accepted. Approvals will be valid only for the project in question based on the recommendation of the Product Review Team. Review for inclusion on the QPL will be pursued subsequent to the project level review.

930.03.02 Resident Engineer Responsibilities. The Resident Engineer will provide guidance to the Contractor in the procedures to be followed. Upon receipt of the complete application package from the Contractor, the Engineer will forward the application to the QPL Program Administrator with pertinent project identification.

930.03.03 Review Team Responsibilities. Immediately upon receiving the application, the review team will evaluate the application on the basis of the standard criteria, including:

Meets ITD Standard Specifications,

Has been successfully used by ITD in the past,

Has been successfully demonstrated under field conditions,

Has been approved for use by other State DOT's,

Meets FHWA requirements (e.g. NCHRP 350),

Positive results have been demonstrated under AASHTO's National Transportation Product Evaluation Program (NTPEP), or

Positive results submitted from an "independent" laboratory

The Team will recommend one of the three options (Approval, Provisional Approval or Denial). to the Program Administrator and the Resident Engineer concurrently.

930.03.04 Program Administrator Responsibilities. The Program Administrator will coordinate the activities of the Resident Engineer and Review Team to ensure time requirements are met.

SECTION 940.00 - PERIODIC REVIEW REQUIREMENTS

940.01 Purpose of Reviews Once a product has been approved for inclusion on the QPL, it is the primary responsibility of the manufacturer to keep the Department informed of any change in the product that could affect its continuing inclusion on the QPL. In order to ensure that the information on the QPL is valid on a continuing basis, a schedule will be established to require updates for all products. These will be dependent on the nature of the product category. Non-response from a manufacturer will result in the subject product being removed from the QPL.

940.02 Schedule of Reviews A schedule of periodic reviews will be established by the Product Review Committee and published on the QPL web site.

SECTION 950.00 - HOW TO USE PRODUCT LISTING

950.01 Search Methods. The Qualified Products List can be searched three ways: by Category of Product, by Trade Name, or by Manufacturer.

950.01.01 Searching by Category. When searching by Category, one selects first the Category and then the appropriate Sub category. Definitions are shown for both the category and sub categories. Only the products that have been either Approved, Provisionally Approved, or are currently under review are listed under the sub category selected. All restrictions general to the sub category or specific to the product are listed. If the product has been classified under more than one sub category, its status may be different under the other sub categories or other restrictions may apply.

950.01.02 Searching by Trade Name. When searching by Trade Name, all products that have been submitted for review will be listed. The products are listed alphabetically by their trade name. If the product selected falls under a sub category that is not included on the QPL, then a message will be shown, indicating that the product is "evaluated based on the Standard Specifications and a specific project contract to ascertain whether the product meets ITD requirements." If a product has been disapproved, then the following message will be shown: "This product was reviewed by the Idaho Transportation Department and found to not meet the Department's requirements." If a product has been classified under more than one sub category, then the status (Approved, Provisionally Approved, or Under Review) as well as any restrictions will be shown for each applicable sub category.

950.01.03 Searching by Manufacturer. When searching by Manufacturer, only manufacturers for whom products have been either Approved, Provisionally Approved, or are currently under review will be listed alphabetically by Manufacturer's name. After information related to the manufacturer is displayed, a list of products by trade name will be displayed. If a product has been classified under one or more sub categories, then the status (Approved, Provisionally Approved, or Under Review) as well as any restrictions will be shown for each applicable sub category.

950.02 Product Information Displayed. When a product is selected on the QPL website from a dropdown menu, the pertinent information is displayed in a popup table. The status of the application is displayed as well as any applicable restrictions, a summary of information supplied by the manufacturer and contact information for the manufacturer. See Figure 950.02.1 below.

Figure 950.02.1 – Product Information Displayed on Website

TRADENAME:

Category	Sub Category	Sub Category Sub Category Restriction				
Qualification Status		Date of Submittal:	Date of Qualification			
Restrictions (Specific to this Product)						
Product Identification (Provided by Manufacturer)						
Product Features (Provided by Manufacturer)						
MANUFACTURER'S INFORMATION						
Manufacturer	Phone	E-Mail	Web Site			

950.03 Levels of Approval.

950.03.01 Approved. If a product is shown as Approved, it may be used on any project where the listed restrictions (either for the sub category or for the specific product) have been met. Prequalification of a product does not limit the Department's ability to request required certifications or samples for required laboratory tests. If a product fails to meet standards or if changes are made to the product, it may be removed from the QPL.

950.03.02 Provisionally Approved. If a product is shown as Provisionally Approved, it may only be used in a demonstration project or on an experimental basis. The Review Team Chairman listed on the website or the Project Engineer must be contacted for specific conditions under which the product may be used.

950.03.03 Under Review. If a product is listed as Under Review, it is possible that the product may be used in a demonstration project or on an experimental basis. Some sub categories of products require an extensive in-field testing program before they can be elevated to either the Provisionally Approved or Approved status. The Review Team Chairman listed on the Review Team Page must be contacted to determine if a product shown as Under Review could be considered and the specific conditions that would be imposed.

950.04 Restrictions. Restrictions fall under two types. In some cases, a restriction will apply to all products that fall under a particular sub category. An example is found under the MSE Wall – Large Block sub category: "Limitation in wall height and application will be determined by the Engineer in accordance with Idaho Transportation Department Standards." In other cases, restrictions will apply only to a specific product. Example could include a temperature restriction for a particular brand of pavement patching material or a slope restriction for a particular brand of erosion control product.

SECTION 960.00 - CATEGORIES OF PRODUCTS

The categories and sub categories of products listed below reflect those included under the QPL Program at the time of publication of this version of the Materials Manual. Where any difference exists between this list and the categories and sub categories listed on the QPL Website, the website shall take precedence.

960.01 Asphalt Modifiers. Products used to enhance the performance of asphalt pavements, either through the modification of the liquid asphalt used in producing an asphaltic pavement or through the treatment of asphaltic pavements to extend or restore their lives.

Anti-Strip Additives: Additives to liquid asphalt used to prevent stripping of the asphalt cement from the aggregate.

960.02 Break-away Bases. Products designed to allow poles supporting illumination fixtures and traffic signal heads as well as signposts to give when struck by a vehicle.

Break-away Sign Support: Products used in permanent installations. Does not include drilled wood posts.

Light Pole Base Break-away Systems: Provides controlled separation between pole base and foundation when struck.

Signal Pole Base Break-away Systems: Provides controlled separation between pole base and foundation when struck.

960.03 Bridge Deck Overlays – Thin. Polymer concrete deck overlay systems, including systems where 1) the resin and aggregate are premixed and compacted with a vibratory screed, 2) the resin is applied and then the aggregate is seeded, and 3) the resin and aggregate are premixed and applied as a slurry.

Polymer Concrete Bridge Deck Thin Overlay – Multiple Layer: Polymer concrete broom and seed deck overlays.

Polymer Concrete Bridge Deck Thin Overlay – Pre-mixed: Polymer concrete deck overlays include the resin and aggregate, which are premixed and compacted with a vibratory screed.

Polymer Concrete Bridge Deck Thin Overlay – Slurry: Polymer concrete deck overlays where the resin and aggregate are premixed and applied as a slurry.

960.04 Channel Liners – Natural or Synthetic. Products designed to slow down or redirect (or divert) flow velocities or channels, and resist shear stress. They include natural fiber and synthetic products.

Channel Liners: Natural Fiber: Three dimensional, biodegradable materials designed to withstand high run-off velocities, slow or redirect flows, resist shear stress, and provide permanent reinforcement. Biodegradable materials provide temporary surface protection during vegetation establishment and include wood bi-products and/or other composites of natural and synthetic fibers.

Channel Liners –Synthetic: Three dimensional, non-biodegradable (geosynthetic) materials designed to withstand high run-off velocities, slow or redirect flows, resist shear stress, and provide permanent reinforcement. Nonbiodegradable (synthetic) materials provide permanent reinforcement and include geocomposites, porous pavements, or containments (plastic or concrete), and/or silt fence.

960.05 Coatings. Metal protective coating systems (galvanizing, powder coatings, pvc coatings, etc.).

Protective Coatings – Metal: Products such as galvanizing and epoxy coatings for the protection of metal products such as rebar, fencing, posts, railing, etc.

960.06 Concrete Admixtures. Products used to modify concrete properties, including air entraining agents, water reducers, super plasticizers, retarders and accelerators.

Air Entraining Admixtures: Liquid products designed for introduction to concrete during the batching process to create a stable and uniform air void system in concrete to reduce damage from freeze-thaw cycles.

ASR Inhibitor Admixtures: Lithium nitrate based liquid products designed for introduction to concrete during the batching process to control alkali-silica reactivity (ASR) in concrete. When reactive silica has sufficient alkalies and moisture, a damaging expansive gel forms. This expansion will result in cracking and premature deterioration of concrete.

Corrosion Inhibitor for Concrete: Liquid products designed for introduction to concrete during the batching process to reduce or prevent corrosion of metals embedded in concrete due to chlorides, carbonation or atmospheric attack.

Rheology Controlling Admixture: Liquid products designed for introduction during the batching process of low slump concrete and paving mixes. Intended to modify concrete rheology, improve response to vibration, facilitate extrusion, and enhance surface appearance.

Shrinkage reduction Admixture: Liquid products designed for introduction during the batching process to modify viscosity, reduce segregation and improve pumpability. Can be used to enhance the performance of self consolidating concrete for use in precast and prestressed concrete.

Type A Water Reducing Admixtures: Liquid products designed for introduction to concrete during the batching process to reduce the water requirement and segregation, improve finishability and workability, and improve setting times.

Type B Retarding Admixtures: Liquid products designed for introduction to concrete during the batching process to provide increased working times.

Type C Accelerator Admixtures: Liquid products designed for introduction to concrete during the batching process to provide improvement in early stiffening and setting characteristics, improved workability and decreased bleeding and segregation.

Type D Water Reducing & Retarding Admixtures: Liquid products designed for introduction to concrete during the batching process to provide increased working time, better workability, higher durability and reduced shrinkage and permeability.

Type E Water Reducing & Accelerating Admixtures: Liquid products designed for introduction to concrete during the batching process to provide improvement in early stiffening and setting characteristics, better workability, higher durability and reduced shrinkage and permeability.

Type F High Range Water Reducing (Plasticizer) Admixtures: Liquid products designed for introduction to concrete during the batching process to provide excellent slump increase and retention in low water to cement ratio concrete.

Type G High Range Water Reducing (Plasticizer) and Retarding Admixtures: Liquid products designed for introduction to concrete during the batching process to provide excellent slump increase and retention in low water to cement ratio concrete

Viscosity Modyfing Admixtures: Liquid products designed for introduction during the batching process to modify viscosity, reduce segregation and improve pumpability. Can be used to enhance the performance of self consolidating concrete for use in precast and prestressed concrete.

960.07 Concrete Waterproofing Systems. Various products and/or systems applied to concrete decks, to prevent moisture and chlorides from penetrating into the deck; as well as buried reinforced concrete slabs, vertical surfaces such as foundation walls and other designated surfaces.

Bridge Deck Penetrating Concrete Sealer: Penetrating concrete sealers designed to provide permanent protection for concrete decks against moisture intrusion and moisture related problems such as freeze/thaw, corrosion caused by chloride ion penetration, and alkali/silica reactions.

Bridge Deck Waterproofing Membranes – AC Wearing Course: Various asphalt, rubber, fiberglass, polyurethane or geotextile systems used to provide a waterproof barrier on a deck under an asphaltic concrete overlay. Includes both preformed and spray applied systems.

Bridge Deck Waterproofing Membranes – Non-AC Wearing Course: Various asphalt, rubber, fiberglass, polyurethane or geotextile systems used to provide a waterproof barrier on a deck under a non-asphaltic concrete wearing course (concrete, wood, soil, sand, or pavers). Includes both preformed and spray applied systems.

Waterproofing and Sealers – Concrete Penetrating: Penetrating concrete sealers designed to provide permanent protection for structural concrete against moisture intrusion and moisture related problems such as freeze/thaw, corrosion caused by chloride ion penetration, and alkali/silica reactions.

Waterproof Membranes – Foundation Walls: Various asphalt, rubber, fiberglass or geotextile systems used to provide a waterproof barrier for foundation walls.

960.08 Culvert Liners. Various plastic products used to repair and rehabilitate existing culverts.

Culvert Liners – HDPE Plastic: A culvert rehabilitation product consisting of a liner manufactured from HDPE plastic and inserted into an existing culvert.

Culvert Liners – Membrane: A culvert rehabilitation product that consists of a membrane system applied and cured on-site.

Culvert Liners – PVC Plastic: A culvert rehabilitation product consisting of a liner manufactured from PVC plastic and inserted into an existing culvert.

960.09 Detectable Warning (Truncated Domes). Detectable warning surfaces for the visually impaired, meeting ADA requirements, used on curb ramps or landings connecting to crosswalks and/or other pedestrian routes.

Detectable Warning – Cast-in-Place: Detectable warning surfaces for the visually impaired, meeting ADA requirements, used on curb ramps or landings connecting to crosswalks and/or other pedestrian routes. Products are cast into new concrete and may be manufactured of cast iron, ceramic, concrete, granite, liquid applied monomers, polyester based composites, polymer composites, polymer concrete, steel, etc.

Detectable Warning – Surface Mounted: Detectable warning surfaces for the visually impaired, meeting ADA requirements, used on curb ramps or landings connecting to crosswalks and/or other pedestrian routes. Products are mounted to the surface of existing concrete and may be manufactured of polymer composites, methyl methacrylates, polyurethanes, thermoplastics, etc.

960.10 Dust Control. Inorganic and organic compounds used to trap or control detached soil particles.

Dust Control: Organic and/or inorganic compounds used to trap or control detached soil particles. Organic materials include gypsum, wood fiber, or other natural cellulose products.

960.11 Dynamic Message Signs. Products incorporated into an Intelligent Transportation System (ITS) to inform motorists of changed conditions ahead.

Dynamic Message Signs: Products incorporated into an Intelligent Transportation System (ITS) to inform motorists of changed conditions ahead.

960.12 Electrical Equipment, Pull Boxes and Accessories. Miscellaneous electrical equipment used for traffic signals and highway lighting, including above break-away connector kits, electrical pedestals, fuses, hazard tape, junction boxes, service pedestals, splice kits, etc

Double Pole Break-away Connector Kit (In-line Phase and Neutral Fused): Will remove power from the pole base to the Luminaire fixture if excessive current is encountered at the fixture.

Double Pole Break-away Connector Kit (In-line Phase Fused): Will remove power from the pole base to the Luminaire fixture if excessive current is encountered at the fixture.

Electrical Pedestals: Products include standard above ground junction boxes and camouflaged above ground junction boxes.

Fuses: Will make or break the electrical path of a circuit.

Hazard Warning Tape: Placed above a conduit or cable to warn anyone excavating of it's presence.

Insulation Piercing Tap Connector: Device used to run an additional branch or circuit from a main line without cutting and splicing the main line.

Junction Boxes – Precast: Products include underground splice boxes, pull boxes, telephone boxes, vaults and manholes precast from concrete.

Junction Boxes and Covers – Composite: Products include underground splice boxes, pull boxes, telephone boxes, vaults and manholes manufactured of composites.

Miscellaneous Electrical: Products include covers, duct spacers, pads, pad vaults, safety pans, spacer panels, switch enclosures, transformer enclosures, wire connectors, etc.

Service Pedestals: Products include commercial power service meter boxes. Single phase, 240 volt and 240/280 volt. 3 phase configuration when specified and may have single or dual meters.

Single Pole Break-away Connector Kit (In-line Fused Crimp-On): Single Pole Break-Away Connector Kit is designed to break a circuit when a pole is separated from the base if struck or if excessive current is drawn by the Ballast. (In-Line Fused Crimp On)

Single Pole Break-away Connector Kit (In-line Fused Set Screw): Single Pole Break-Away Connector Kit is designed to break a circuit when a pole is separated from the base if struck or if excessive current is drawn by the Ballast. (In-Line Fused Set Screw)

Single Pole Break-away Connector Kit (In-line Fused): Single Pole Break-Away Connector Kit is designed to break a circuit when a pole is separated from the base if struck or if excessive current is drawn by the Ballast. (In-Line Fused)

Single Pole Break-away Connector Kit (In-line Non-Fused Crimp-On): Singe Pole Break-Away Connector Kit is designed to break a circuit when a pole is separated from the base when struck. (In-Line Non-Fused Crimp-On)

Single Pole Break-away Connector Kit (In-line Non-Fused Set Screw): Singe Pole Break-Away Connector Kit is designed to break a circuit when a pole is separated from the base when struck. (In-Line Non-Fused Set Screw)

Single Pole Break-away Connector Kit (Y-Tap Neutral Non-Fused Crimp-On): Singe Pole Break-Away Connector Kit is designed to break a circuit when a pole is separated from the base when struck. (Y-Tap Neutral Non-Fused Crimp-On)

Single Pole Break-away Connector Kit (Y-Tap Neutral Non-Fused Set Screw): Single Pole Break-Away Connector Kit is designed to break a circuit when a pole is separated from the base when struck. (Y-Tap Neutral Non-Fused Set Screw)

Single Pole Break-away Connector Kit (Y-Tap Phase Fused Crimp-On): Single Pole Break-Away Connector Kit is designed to break a circuit when a pole is separated from the base when struck. (Y-Tap Fused Crimp-On)

Single Pole Break-away Connector Kit (Y-Tap Phase Fused Set Screw): Single Pole Break-Away Connector Kit is designed to break a circuit when a pole is separated from the base when struck. (Y-Tap Fused Set Screw)

Splice Kits: Used to connect wires in a circuit and seal them against moisture and the elements.

960.13 Erosion Control – Blankets. Products designed to stabilize and protect disturbed soils from raindrop impact and soil erosion, reduce soil erosion and assist with vegetative growth, establishment and provide protection against natural elements.

Erosion Control Blankets – Blown-on Organic: Organic degradable products (including compost) with natural fibers (wood fiber, recycled wood cellulose, gypsum, guar gum, compost, coconut (coir), straw, or combinations of other organic materials) combined with fertilizer ingredients, natural or organic binder agents.

Erosion Control Blankets – **Bonded Fiber Matrix:** Natural organic soil treatment combined with natural fibers (wood or cellulose, gypsum, or other organic materials) fertilizer ingredients, plant nutrients and proteins, and natural or synthetic binder agents. Materials include wood fiber or wood cellulose fiber, recycled paper, compost, or gypsum based product with organic, acrylic or polypropylene binding fibers included.

Erosion Control Blankets – **Natural or Synthetic (RECP):** A temporary degradable RECP composed of processed natural or polymer fibers mechanically, structurally, or chemically bound together to form a continuous matrix.

Erosion Control Blankets – Seeded (SECP): Organic degradable fabricated rolls or organic soil treatment (including compost) with natural fibers (wood, recycled paper, gypsum, or other organic materials) combined with fertilizer ingredients, natural binder materials, and seed.

Erosion Control Blankets – Spray-on (SECP): Hydro-applied semi-permeable membrane or organic fibers allow rainfall to infiltrate or reduce evaporation. Products include organic soil treatment with natural fibers (wood fiber, recycled wood cellulose, gypsum, guar gum, compost, coconut (coir), straw, or combinations of other organic materials) combined with natural or organic binder agents.

Rolled Erosion Control Blankets – **Natural (RECP):** A fabric-like material composed of natural fibers or woven fiber material manufactured into rolls to protect the soil surface and prevent sediment loss. Products can range from temporary degradable to semi-permanent. Biodegradable fabricated rolls (short-term or temporary) include wood or recycled wood fibers, straw, hay, coconut (coir), jute, or combinations thereof.

Rolled Erosion Control Blankets – Synthetics (RECP): A fabric-like material composed of synthetic fibers or woven fiber material manufactured into rolls to protect the soil surface and prevent sediment loss. Products can range from temporary degradable to long-term non-

degradable. Synthetic fabricated rolls (degradable or non-degradable, long-term) include rigid vinyl or nylon, or flexible poly materials.

960.14 Erosion Control – General. Products designed to stabilize and protect disturbed soils from erosion through the reduction in water velocities, assist with the establishment of vegetative growth, and provide protection against natural elements. Products include filter berms, mesh filter socks, and fiber wattles.

Berms: Designed hydraulic controls which modify storm runoff by slowing water velocities; filtering soil, silt, sand, rust and other fine particles; or releasing water at a slower rate. Products include various forms of filter berms.

Filter Socks: Designed hydraulic controls which modify storm runoff by slowing water velocities; filtering soil, silt, sand, rust and other fine particles; or releasing water at a slower rate. Products include mesh filter socks with or without flaps; containing natural fibers or biodegradable synthetic fibers.

Wattles – Biodegradable: Designed hydraulic controls which modify storm runoff by slowing water velocities; filtering soil, silt, sand, rust and other fine particles; or releasing water at a slower rate. Products include wattles with or without flaps; containing natural fibers or biodegradable synthetic fibers.

Wattles – Reusable: Designed hydraulic controls which modify storm runoff by slowing water velocities; filtering soil, silt, sand, rust and other fine particles; or releasing water at a slower rate. Products include wattles with or without flaps; containing woven or non-woven synthetic fibers, including closed cell polyethylene foam.

960.15 Expansion Joints / Joint Sealers. Products used for the controlling and moisture proofing of joints in rigid pavements and bridge decks.

Asphalt Plug Joint: A joint sealant system used in asphalt overlays of bridge decks comprised of either polymer modified oil and crushed 1/2" aggregate placed over a steel plate or a equivalent packaged system.

Compression Seals: A joint sealant system comprised of neoprene compression seals that meet AASHTO M 220.

Strip Seals: These seals are comprised of pre-formed expansion joint filler.

960.16 Fertilizers and Soil Amendments. Inorganic or organic compounds applied to or mechanically mixed with soil to foster plant growth.

Fertilizer – Slow Release: Products used to enhance or stimulate growth and establishment of native and desirable vegetation. Products usually include Nitrogen, Potassium, Phosphorus, and/or other natural soil components.

Soil Amendments – Natural: Products used to encourage or enhance native and desirable vegetation. Natural materials include organic soil compost or topsoil, manufactured organic soil amendments, nutrients, plant minerals, soil biological stimulants and/or natural fibers – roving and tackifiers, individual fibers, extended roping, etc. Manufactured organic soil amendments shall include organic materials, nutrients, and/or plant minerals.

960.17 Flashing Arrow Panels (FAP). Flashing Arrow Panels (FAP), sometimes referred to as "arrow display", are signs with a matrix of elements. The matrix, capable of either flashing or sequential displays, is intended to provide additional warning and directional information to assist in merging and controlling traffic through or around a temporary traffic control zone. An arrow display should be used in combination with appropriate signs, barricades, or other traffic control devices.

Flashing Arrow Panels (FAP) – Trailer Mounted: Self contained changeable flashing arrow panel consisting of an arrow panel, control system, power source, and mounting and transportation trailer.

Flashing Arrow Panels (FAP) – Vehicle Mounted: A changeable flashing arrow panel, which includes a portable, lightweight, matrix display. Control systems and power sources may be included or provided externally. A variety of mounting systems may be employed to mount panel to vehicle.

960.18 Glare Screens. Screens designed to block the headlights of oncoming vehicles.

Glare Screens: Screens designed to block the headlights of oncoming vehicles.

960.19 Guardrail Systems (Permanent). Products used in permanent installations to protect the safety of motorists and pedestrians as well as safeguarding facilities, including: rail, cable, posts, end treatments and miscellaneous hardware.

Blockouts – **Guardrail Posts:** Products used to hold metal guard rails out from the supporting posts. Materials may include composites, metals and plastics.

Crash Cushions (Permanent):

Gates – Guardrail (Permanent): Products designed to provide access through a permanent barrier while maintaining positive separation.

Posts – **Guardrail:** Posts used to support metal rail guard rail systems including concrete, composites, laminates, metals, and plastics.

Rail – Aluminum (Permanent):

Rail - Concrete (Permanent):

Rail – Steel (Permanent):

Tension Cable Barrier System:

Terminals – Guardrail (Permanent):

960.20 Guardrail Systems (Temporary). Products used to protect the safety of motorists, workers and others during construction and maintenance operations, including: rail, posts, end treatments and miscellaneous hardware.

Crash Cushions (Temporary):

Gates - Guardrail (Temporary):

Rail - Concrete (Temporary):

Rail - Plastic (Temporary):

Rail - Steel (Temporary):

Terminals – Guardrail (Temporary):

960.21 Illumination. Products used for highway, parking lot or sign illumination, including luminaries, control equipment, poles and miscellaneous equipment.

Illumination Units – Trailer Mounted: Self contained lighting including generator set for use in work zones or as auxiliary lighting in other approved locations.

Lamps – **Luminaire and Signlighter:** 250 Watt and 400 Watt HPS Lamps for Luminaries, 150 Watt HPS for Sign Lighters, Sizes of tunnel lamps are specified for individual design.

Luminaire Poles: Luminaire poles for 30' & 50' mounting height.

Luminaires – 240 Volt: Corba head fixtures charcoal filter, 250 HPS, 400 Watt HPS

Luminaires – 480 Volt: Corba head fixtures with charcoal filter, 250 HPS, 400 Watt HPS

Miscellaneous Lighting Equipment:

Photoelectric Control: Make ore break an Illumination circuit when activated by the absence of light and de-activated by the presence of light.

Sign Lighter – 120 Volt: Mounted on a sign bridge or structure to illuminate a sign from below making it visible to a motorist before the retroreflectivity of the sheeting can be activated by the vehicle headlights. For use with 120 volt service.

Sign Lighter – 240 Volt: Mounted on a sign bridge or structure to illuminate a sign from below making it visible to a motorist before the retroreflectivity of the sheeting can be activated by the vehicle headlights. For use with 120 volt service.

Sign Lighter – **480:** Volt Mounted on a sign bridge or structure to illuminate a sign from below making it visible to a motorist before the retroreflectivity of the sheeting can be activated by the vehicle headlights. For use with 120 volt service.

Tunnel Illumination: Provide lighting in areas not illuminated by natural light.

960.22 Landscape Anchoring Devices. Products used to anchor various sediment and erosion control systems, including stakes and staples.

Stakes – Sediment & Erosion Control (Biodegradable): Made of 100% natural biodegradable material; is broken down over time by naturally occurring microorganisms in the ground. Will disappear 8-36 months and leaves no residuals. Has no impact to the environment. Products conform to US Biodegradable Standard ASTM D-6400.

Stakes – Sediment & Erosion Control (Permanent): Metal, plastic, polypropylene, petrochemical, or other permanent type anchoring device. Product remains in the ground for longer than 36 months or indefinitely.

Staples – Erosion Control Blanket: Metal, plastic, polypropylene, petro-chemical, or other permanent type anchoring device. Product remains in the ground for longer than 36 months or indefinitely.

960.23 Landscaping. Plant products used to enhance pollutant removal and aesthetic values, and control erosion.

Landscaping: Vegetation or plant materials used to achieve a particular look or systematic design. Materials include vegetation (sod, grasses, forbs, ground cover, shrubs, and/or trees), irrigation materials, organic products (including compost, mulch or other natural materials), soil amendments, topsoil, fertilizer ingredients, rock or other natural features.

960.24 Mechanically Stabilized Earth (MSE) Walls. Products which stabilize earth slopes through the structural properties of the fill material reinforced with geosynthetic or steel reinforcement elements, including segmental concrete block facing, concrete panel facing, and welded wire facing.

MSE – **Concrete Panel Facing:** A Mechanically Stabilized Earth (MSE) wall system with a concrete panel facing.

MSE – **Large Block:** A Mechanically Stabilized Earth (MSE) wall system consisting of large interlocking blocks. Short walls depend on the weight of the blocks for their stability. Walls of greater height require a grid mechanism in addition to gravity for their stability.

MSE – **Segmental Concrete Block Facing:** A Mechanically Stabilized Earth (MSE) wall system with a segmental block wall facing.

MSE – **T-Wall System**: A Mechanically Stabilized Earth (MSE) wall system with a "T" shaped member providing both the facing surface and the frictional resistance to horizontal movement.

MSE – **Welded Wire Facing:** A Mechanically Stabilized Earth (MSE) wall system with a welded wire facing.

960.25 Mulch (Long Term). Products that improve soil structure to help establish desirable vegetation.

Mulch – Plastics: Sold in rolls (black or clear plastic) for use primarily as a vegetation barrier. Plastic warms the soil, plus blocks air and water. Plant growth is accelerated by the added heat and moisture retained underneath the mulch layer, but since plastic sheets provide a solid barrier, moisture must be provided by an irrigation system.

Mulch – Rubber: Rubber mulch is loose fill permanent groundcover for landscape applications. When used as directed, rubber mulch will help reduce weed growth and eliminate the attraction of wood-eating insects. Rubber mulch is composed of 100% recycled rubber from shredded tires and can be colored as desired.

960.26 Mulch (Temporary and Vegetative). Products that add nutrients and improve soil structure over a short-term period to help establish desirable vegetation.

Mulch – Biofertilization: Organic material that contain fertilizers, micro-organisms, natural enzymes, and/or bacteria.

Mulch – Compost: A weed-free organic material, improves water interaction with soil, inoculates soil with beneficial microbes (bacteria, fungi) including filter berms or slope seed establishment. Materials include chicken or bovine manure, recycled plant or wood material, well decomposed organic matter, bark or wood fibers, or recycled paper products with natural proteins.

Mulch – Hydro Seeding: Hydro-applied semi-permeable membrane or organic fibers that allow rainfall to infiltrate or reduce evaporation. This type of product provides an organic cover to protect seeds, enhance germination and hasten revegetation when mixed with water and applied with hydraulic mulching equipment. Products include organic soil treatment with natural fibers (wood fiber, recycled wood cellulose, gypsum, guar gum, compost, coconut (coir), straw, or combinations of other organic materials) combined with natural or organic binder agents.

Mulch – Mycorrhizal: Organic mulch material inoculated with or contains micro-organisms (fungi).

Mulch – Natural Fibers: Natural material that contains plant and/or wood fibers, well decomposed or recycled paper or plant materials (including weed-free hay or straw, plant debris (woody plant material), rock or soil products, or combinations thereof.

960.27 Paint Systems. Paint systems for the protection and preservation of concrete and metal structures, including anti-graffiti paint systems.

Paint - Anti-Grafitti:

Paint – Concrete:

Paint – Steel:

960.28 Patching and Crack Repair Materials – ACC. Products used for the patching of potholes, cracks and ruts in flexible pavements.

Cold Patch – ACC: Products include cold mix asphalt, epoxy and polymer based patching compounds for the repair of bituminous pavement.

Crack Sealant – ACC: Products include hot poured, polymer-modified and asphalt rubber sealants.

Hot Patch – ACC: Products include hot mix asphalt and polymer based patching compounds for the repair of bituminous pavement.

960.29 Patching and Crack Repair Materials – PCC. Products used for the patching of spalls, cracks and corner breaks in rigid pavements.

Cold Patch – PCC: Products include cold mix asphalt, epoxy, Portland cement and polymer based patching compounds for the repair of Portland cement concrete pavement.

Crack Sealant – PCC: Products include silicone, polymer-modified and asphalt rubber sealants.

Hot Patch – PCC: Products include thermo plastic based patching compounds having a wide temperature application range for the repair of Portland cement concrete pavement.

960.30 Pavement Geosynthetics. Pavement rehabilitation products, including: hybrid paving fabrics, pavement reinforcement grids, interlayer stress absorbing composites, and other proprietary fabric systems.

Pavement Overlay Geotextile: Nonwoven geotextile fabrics with a high asphalt absorption and specifically designed for asphalt overlay applications.

Pavement Reinforcement Geosynthetic: Pavement rehabilitation products including hybrid paving fabrics and other proprietary fabric systems designed to increase the fatigue life of flexible pavements and reduce water penetration through the surface.

Reflective Crack Retardant Geosynthetic: Pavement rehabilitation products including pavement reinforcement grids, interlayer stress absorbing composites, and other proprietary fabric systems designed to retard reflective cracking in asphaltic overlays from concrete or asphaltic under layers.

960.31 Pavement Markings. Temporary striping tape, permanent striping tape, thermoplastic pavement markings, 100% epoxies, and traffic striping paint & beads used for the delineation and marking of traffic lanes, as well as raised pavement markers.

Glass Beads: Glass beads meeting appropriate AASHTO standards for use in pavement marking systems.

Pavement Marking Tape (Permanent): A pre-formed tape pavement marking system in which the tape is glued to concrete surfaced or rolled onto asphalt surfaces.

Pavement Marking Tape (Temporary): A foil-backed tape pavement marking system intended for short-term applications.

Pavement Markings – 100% Epoxy: Spray applied 100% Epoxy paint systems used for pavement markings.

Pavement Markings – **Heat Fused Thermo Plastic:** Thermo Plastic pavement marking systems in which the materials in the form of solid segments are placed on the pavement and then fused to the surface with heat.

Pavement Markings – Hot Applied Thermo Plastic: Thermo Plastic pavement marking systems in which the materials are melted and then applied to the pavement.

Pavement Markings – Methyl Methacrylate: Cold-applied two or three part liquid pavement marking system.

Pavement Marking – Polyurea: A durable pavement marking system consisting of a spray applied Polyurea paint system.

Raised Pavement Markers – Flexible: Reflective seal coat tabs.

Raised Pavement Markers – Rigid Non-Plowable: Reflective surface mounted permanent pavement markers.

Raised Pavement Markers – Rigid Illuminated: Raised pavement markers which include internal LED light sources.

Raised Pavement Markers – Rigid Plowable: Reflective permanent pavement markers with a subsurface anchoring system designed to resist dislodging by a snowplow.

Traffic Paint – Solvent Borne: Spray applied solvent borne paint systems used for pavement markings.

Traffic Paint – Water Borne (Standard): Spray applied water borne paint systems used for pavement markings.

Traffic Paint – **Water Borne** (**High Build**): Spray applied water borne paint systems used for pavement markings which allow for a thicker application rate and longer life.

Traffic Paint – Water Borne (Low Temperature): Spray applied water borne paint systems used for pavement markings which is formulated to allow it to be applied at lower temperatures.

960.32 Pavement Reinforcement. Products used in the reinforcement of rigid pavement, including dowels, tie bars, baskets, etc.

Dowel Bars – Coated: Epoxy coated smooth steel dowels conforming to ASHTO M 254 or AASHTO M 31 M; installed across transverse joints in rigid pavements for the purpose of transferring loads between adjacent panels.

Dowel Bars – **Fiber Glass:** Smooth fiber glass dowels installed across transverse joints in rigid pavements for the purpose of transferring loads between adjacent panels.

Dowel Bars – Non Corrosive: Uncoated, high corrosion resistant smooth steel dowels that meet or exceed the mechanical properties of ASTM A615 Grade 75 steel bars, as a result of its chemistry and/or manufacturing process; installed across transverse joints in rigid pavements for the purpose of transferring loads between adjacent panels.

960.33 Pile Splicers for Steel Piles. Prefabricated splices used to connect individual lengths of steel H piles or pipe piles to facilitate the pile splicing process.

Splicers for Steel H Piles: Prefabricated splicers for splicing steel H piles.

Splicers for Steel Pipe Piles: Prefabricated splicers for splicing steel pipe piles.

960.34 Pile Tip Protectors for H Pile. Protective devices for the tips of steel H piling.

Common Pile Point for Gravels: Tip protectors for H piles driven into soils with gravels.

Common Pile Point for Rock or Gravels with Boulders: Tip protectors for H piles driven into soils with gravels, boulders, or fractured rock.

General Use Pile Tip for Wide Contact Area on Rock: Tip protectors for H piles - General Use.

Rock Pile Point – Slim Section with Teeth: Tip protectors for H piles driven into rock, including angled rock strata.

Square Pile Tip for End Bearing in Gravels & Level Rock: Tip protectors for H piles driven into gravels or level rock.

960.35 Pile Tip Protectors for Pipe Pile. Protective devices for the tips of steel pipe piling.

60 Degree Conical Point – Inside Fit: Conical points for Pipe piles. Tips are angled 60 Degrees from horizontal and are designed to fit inside the pile.

60 Degree Conical Point – Outside Fit: Conical points for Pipe piles. Tips are angled 60 Degrees from horizontal and are designed to fit over the end of the pile.

Closure Boot: Closure boot designed to protect the end of Pipe piles driven into dense soil.

Open End Cutting Shoe – Inside Fit: Cutting shoe with an open end designed to help pipe piles penetrate dense or hard soils.

960.36 Portable Changeable Message Signs (PCMS). Portable Changeable Message Signs (PCMS) are traffic control devices with the flexibility to display a variety of messages to fit the needs of road and street authorities. Each message consistes of one or more displays. PCMS are used most frequently on high density, urban freeways, but have applications on all types of highways where highway alignment, traffic routing problems or other pertinent conditions require advance warning and information.

Portable Changeable Message Signs (PCMS) - Trailer Mounted: These are self contained changeable message signs consisting of a message sign panel, control system, power source, and mounting and transportation trailer. They are traffic control devices with the flexibility to display a variety of messages to fit the needs of road and street authorities. Each message consists of one or more displays. PCMS are used most frequently on high density, urban freeways, but have applications on all types of highways where highway alignment, traffic routing problems or other pertinent conditions require advance warning and information.

Portable Changeable Message Signs (PCMS) - Vehicle Mounted: These are traffic control devices designed to be mounted on vehicles and with the flexibility to display a variety of messages to fit the needs of road and street authorities. Each message consists of one or more displays. PCMS – Vehicle mounted PCMS's are used most frequently for moving work zones and pilot operations that require advance warning and information

960.37 Roadway Support Geosynthetics. Products added to roadway sections to reinforce, stabilize and/or separate subgrades, sub-bases and bases, including geotextiles and geogrids.

Granular Base Reinforcement – Geogrids: Geogrids are generally described as stiff or flexible polymer grid-like sheets with large apertures used primarily as reinforcement to spread the load over a wider area of a granular base and allow a reduction in base thickness.

Granular Base Reinforcement – Geotextiles: Geotextiles are typically defined as flexible, textile-like fabrics of controlled permeability used to provide one or more of the following functions: separation, reinforcement, filtration and drainage.

Subgrade Separation Geotextile: Woven or Nonwoven geotextiles used over subgrades to provide separation between base and subgrade materials.

Subgrade Stabilization Geotextile: Woven or Nonwoven geotextiles used over subgrades to provide separation and confinement of base materials.

960.38 Sediment Control (Long Term). Products used for the permanent or long-term control of sediment flow into watercourses. Products may be reusable. Materials can include precast concrete, PVC, cast iron, geosynthetics, etc.

Inlet Outlet Protection – Geosynthetics: Products manufactured from various types of geosynthetic materials (woven and non-woven) to be used for long term or reusable sediment control applications. Products include traps for protection of both flat and curb type inlets and/or outlets.

Sediment Control – Geosynthetic Clay Liners: Factory-manufactured hydraulic barrier with sodium bentonite clay encapsulated between two polypropylene geotextiles (woven or non-woven) for use as pond liners in storm water detention basins, lagoons or swales.

Sediment Control – Geosynthetics: Products manufactured from various types of geosynthetic materials (woven and non-woven) to be used for long term or reusable sediment control applications. They are used to provide one or more of the following functions: filtration, drainage, ditch control, and liquid barrier. Products include silt fences, temporary sediment barriers, etc..

Sediment Control – Structures: Products such as catch basins, curb inlets, and drain basin inlets used in storm drain systems to allow sediment to drop out of storm water. Materials can include precast concrete, PVC, cast iron, etc.

960.39 Sediment Control (Temporary). Products used to control the flow of sediment into water courses on a short-term temporary basis during construction or maintenance activities, including roadside ditches, streambeds, storm water channels, slopes, construction sites, inlets and outlets, etc. Products are primarily composed of bio-degradable and/or natural fibers with natural or synthetic bindings.

Channel Protection: Designed hydraulic controls which modify storm runoff by slowing water velocities; filtering soil, silt, sand, rust and other fine particles; detaining flows; or releasing water at a slower rate. Products include detention and retention basins, check dams, weirs, catch basins, log structures, filter berms, mesh filter socks, silt fence, and fiber wattles.

Ditch Control: Designed hydraulic controls which modify storm runoff by slowing water velocities, filtering soil, silt, sand, rust and other fine particles, detaining flows or releasing water at a slower rate. Products include check dams, weirs, catch basins, log structures, filter berms, mesh filter socks, and fiber wattles.

Ditch Control w/Flaps: Designed hydraulic controls which modify storm runoff by slowing water velocities; filtering soil, silt, sand, rust and other fine particles; detaining flows; or releasing water at a slower rate. Products may include mesh filter socks or wattles with flaps and may contain seed. Can be used upslope and downslope.

Inlet/Outlet Protection: Designed hydraulic controls which modify storm runoff by slowing water velocities; filtering soil, silt, sand, rust and other fine particles; detaining flows; or releasing water at a slower rate. Products include filter berms, mesh filter socks and/or fiber wattles designed for short-term use.

Natural Filter Barrier – **Biofiltration:** Designed hydraulic controls which modify storm runoff by slowing water velocities, filtering soil, silt, sand, rust and other fine particles, detaining flows or releasing water at a slower rate. Products made from natural materials such as straw, sand, mulch, compost, wood or wood fiber, other biodegradable or recycled organic material, filter berms, mesh filter socks and fiber wattles.

Sediment Control Barriers: Designed hydraulic controls which modify storm runoff by slowing water velocities; filtering soil, silt, sand, rust and other fine particles; detaining flows or

releasing water at a slower rate. Products include log structures, filter berms, and mesh filter socks and fiber wattles.

Sediment Traps: Designed hydraulic controls which modify storm runoff by slowing water velocities; filtering soil, silt, sand, rust and other fine particles; detaining flows or releasing water at a slower rate. Products include detention and retention basins, check dams, weirs, or debris.

Stream Bank Stabilization: A designed control which renovates, modifies, or stabilizes stream bank structures for use on flowing stream and creek banks, roadsides, lakes, and some slopes. Products include organic material such as compost or natural fibers and may contain live vegetative plugs, sprigs, or plant materials for instant vegetative covering.

Wetlands: A designed control which renovates, modifies, or stabilizes stream bank structures for use on stream and creek banks, roadsides, lakes, and some slopes. Products include organic material such as compost or natural fibers and may contain live vegetative plugs, sprigs, or plant materials for instant vegetative covering.

960.40 Snow and Ice Control. Chemical products and application systems that are used in anti-icing or deicing operations on roadway pavements and bridge decks.

- **Category 1 Corrosion Inhibited Liquid Magnesium Chloride:**
- **Category 2 Corrosion Inhibited Liquid Calcium Chloride:**
- Category 3 Non-Corrosion Inhibited Liquid Calcium Magnesium Acetate (CMA):
- **Category 4 Corrosion Inhibited Sodium Chloride (Solid):**
- Category 5 Corrosion Inhibited Sodium Chloride Plus 10% Magnesium Chloride (Solid):
- Category 6 Corrosion Inhibited Sodium Chloride Plus 20% Magnesium Chloride (Solid):
- **Category 7 Calcium Magnesium Acetate (Solid):**
- Category 8A-B Non-Corrosion Inhibited Sodium Chloride (Solid): Standard gradation brining salt with insoluable material at less than 1% andmoisture content at less than 0.5%.

Category 8A-R – Non-Corrosion Inhibited Sodium Chloride (Solid): Standard gradation road salt with moisture at less than 0.5%.

Category 8B – Non-Corrosion Inhibited Sodium Chloride (Solid): Contains moisture content at less than 5.0%.

Category 8C-B – Non-Corrosion Inhibited Sodium Chloride (Solid): Fine gradation brining salt with insoluable material at less 1% and moisture content at less than 0.5%.

Category 8C-R – Non-Corrosion Inhibited Sodium Chloride (Solid): Fine gradation road salt with moisture content at less than 0.5%.

960.41 Soil Binder / Tackifier. Products used to enhance the performance of seed or fertilizers by binding mulch fibers with the seed and/or fertilizers, thereby reducing their susceptibility to wind or water erosion.

Soil Binders – Guar Based: Products that provide protection against soil erosion, increases water penetration, reduces water run-off, or binds up soil particles. Products contain natural plant bi-product, such as guar gum, and/or neutral polysaccharide galactomannan or polyacrylamide.

Soil Binders – Gypsum Based: Products that provide protection against soil erosion, increases water penetration, reduces water run-off, or binds up soil particles. Products contain natural plant bi-product, such as gypsum based soil binders.

Soil Binders – **Natural Fiber Based:** Products that provide protection against soil erosion, increases water penetration, reduces water run-off, or binds up soil particles. Binding components contain natural plant bi-product such as pitch and rosin emulsions.

Soil Binders – Polymer Based: Products that provide protection against soil erosion, increases water penetration, reduces water run-off, or binds up soil particles. Binding components contain a polymer component such as liquid or acrylic polymers, and/or polypropylene fibers.

Soil Binders – Psylium Based: Products that provide protection against soil erosion, increases water penetration, reduces water run-off, or binds up soil particles. Binding components contain a 100% organic outer coating of the plantago plant, known as psylium.

Soil Binders – Starch Based: Products that provide protection against soil erosion, increases water penetration, reduces water run-off, or binds up soil particles. Products contain natural plant bi-product and starch based soil binders.

960.42 Soil Reinforcement – Geosythetics. Products added to stabilize and/or strengthen soil, such as geotextiles or geogrids.

Soil Reinforcement – **Geogrids:** Geogrids are generally described as stiff or flexible polymer grid-like sheets with large apertures used primarily as reinforcement of unstable soil. Some geogrids may be used in combination with specific MSE systems.

Soil Reinforcement – **Geotextiles:** Geotextiles are typically defined as flexible, textile-like fabrics of controlled permeability used to provide one or more of the following functions: separation, reinforcement, and confinement. Some geotextiles may be used in combination with specific MSE systems.

960.43 Structural Materials and Components. Miscellaneous metal, plastic and fiberglass products used in or associated with steel or concrete structures.

Rebar Chairs: Metal, precast concrete or plastic devices designed to hold rebar off the grade or form.

Rebar Splicers: Epoxy coated or non epoxy coated reinforcing bar mechanical splices meeting the requirements of Section 503 of the ITD Standard Specifications.

Reinforcement – **Corrosion Resistant:** Uncoated, high corrosion resistant steel-reinforcing products that meet or exceed the mechanical properties of ASTM A615 Grade 75 steel bars, as a result of its chemistry and/or manufacturing process.

Steps and Grab Irons: For manholes and other drainage features, metallic and non-metallic.

Structural Reinforcement Wrapping System: Composite reinforcement systems used for wrapping columns, beams and walls.

960.44 Temporary Traffic Control Devices. Portable trailer mounted signs, traffic signals & illumination units; traffic cones, temporary tubular markers, drums, vertical panels and barricades used for the temporary control of traffic; and miscellaneous work zone safety devices.

Miscellaneous Temporary Traffic Control Devices: Includes such items as portable radar speed displays, temporary curbing, products for repairing existing drums/barrels, temporary covers for signs, rails for use on Type III barricades, etc.

Miscellaneous Work Zone Safety Devices: Includes such items as portable radar speed displays, intrusion alarms, portable speed bumps, modified flagger paddles, automated flagger assistance devices, and gawk screens.

Portable Guardrail Delineators – Flexible: Products include flexible roadside markers used for temporary traffic guidance and/or warning when mounted on temporary concrete barriers.

Portable Guardrail Delineators – Rigid: Products include rigid roadside markers used for temporary traffic guidance and/or warning when mounted on temporary concrete barriers.

Reflective Sheeting – Reboundable: Reflective sheeting products intended for application on flexible, reboundable surfaces such as drums, posts, barricades or tube delineators.

Rollup Signs: Products fabricated from flexible reflectorized UV-stabilized heavy-duty two sided vinyl coated fabric designed for temporary use in conjunction with portable sign supports.

Sign Supports – Portable: Portable supports for work zone signs.

Traffic Barricades: Portable or fixed device having from one to three rails with appropriate markings. It is used to control traffic by closing, restricting, or delineating all or a portion of the right-of-way.

Traffic Cones: Cone shaped channelizing device used in maintenance or construction zones.

Traffic Drums: Products include plastic barrels and drums used for temporary traffic guidance in construction or maintenance work zones.

Traffic Signals – Trailer Mounted: Self contained automated portable traffic signal system capable of directing bi-directional traffic.

Tubular Markers – Category I (Temporary): Products include tubular markers with or without weighted bases; used for temporary traffic guidance in construction or maintenance work zones. These devices ARE NOT approved with any lighting devices attached.

Tubular Markers – Category II (Temporary): Products include tubular markers with or without weighted bases; used for temporary traffic guidance in construction or maintenance work zones. These devices are approved with lighting devices attached.

Vertical Panels: Flat faced, rectangular shaped channelizing device with diagonal directional stripes.

960.45 Traffic Control Signs and Devices. Reflective sign sheeting and break-away sign supports used for temporary and permanent traffic control signs; as well as guardrail delineators, permanent tubular markers, reflectors, roadside delineators, sign posts, and snow poles.

Guardrail Delineators – Flexible: Products include flexible roadside markers used for permanent traffic guidance and/or warning to pedestrians or bicyclist approaching or traveling along the guardrail or barrier from the rear. The products can be designed to be mounted on concrete barriers, metal guardrail, blockouts or guardrail posts.

Guardrail Delineators – Rigid: Products include rigid roadside markers used for permanent traffic guidance and/or warning to pedestrians or bicyclist approaching or traveling along the guardrail or barrier from the rear. The products can be designed to be mounted on concrete barriers, metal guardrail, blockouts or guardrail posts.

Miscellaneous Traffic Control Devices: Includes such items as solar powered caution and stop beacons for use with permanent traffic control signs.

Reflective Sheeting: Products applied to sign blanks for both permanent or temporary signs as well as other rigid substrates, such as aluminum or wood, used in traffic control operations.

Reflective Sheeting – Reboundable: Reflective sheeting products intended for application on flexible, reboundable surfaces such as drums, posts, barricades or tube delineators.

Reflectors: Reflective markers designed for mounting on signs, posts, etc.

Roadside Delineators – **Flexible:** Products include flexible roadside markers used for permanent traffic guidance. They incorporate reflective material permanently adhered to the marker.

Roadside Delineators – **Rigid:** Products include rigid roadside markers used for permanent traffic guidance. They include products fabricated from both steel or composite materials and feature bolt-on reflective markers.

Sign Blanks: Proprietary materials including high performance thermoplastics which may or may not include pre-applied sign sheeting material for use in permanent or temporary installations.

Sign Posts – **Non-Wood or Metal:** Signposts made of composite materials including recycled plastics, fiberglass and lightweight aggregates. Wood and metal posts are covered by Standard Specifications and are not included in the QPL.

Snow Poles – Flexible: Products include flexible poles used for permanent traffic guidance during conditions where standard Roadside Delineators and Guardrail Delineators would be obscured from view by snow.

Snow Poles – Rigid: Products include rigid poles used for permanent traffic guidance during conditions where standard Roadside Delineators and Guardrail Delineators would be obscured from view by snow.

Tubular Markers – Category I (Permanent): Products include tubular markers used for permanent traffic guidance in conjunction with channelization or in gore areas. These devices ARE NOT approved with any lighting devices attached.

Tubular Markers – Category II (Permanent): Products include tubular markers used for permanent traffic guidance in conjunction with channelization or in gore areas. These devices are approved with lighting devices attached.

960.46 Traffic Signal Equipment. Cabinets, poles, mast arms, signal heads, lamps, controllers, relays, transformers, etc. used for the control of traffic.

2 Conductor Loop Lead-in Cables:

4 Conductor Loop Lead-in Cables:

Conflict Monitors:

Emergency Vehicle Preemption Equipment:

Flooded Roadway Detection Systems:

Loop Cables:

Loop Sealant:

Miscellaneous Signal Accessories:

Over Height Vehicle Detection Systems:

Pedestrian Pole Base:

Pedestrian Push Button Assemblies:

Pedestrian Signal Heads:

Pedestrian Signal Mounts – Side of Post:

Pedestrian Signal Mounts - Top of Post:

Radar Speed Monitor – Permanent Mount:

Sign Mounts & Brackets – Mast arm or Pole Mounted:

Signal Cabinet Accessories:

Signal Cabinets – Back Panels:

Signal Cabinets – Racks:

Signal Controllers:

Signal Detectors:

Signal Poles and Mast Arms:

Vehicle Signal Head:

Vehicle Signal Head Visors:

Vehicle Signal Lamps:

Vehicle Signal Mounts & Brackets – Mast Arm Mounted:

Vehicle Signal Mounts & Brackets – Side of Post:

Vehicle Signal Mounts & Brackets – Top of Post:

Video Detection Systems:

960.47 Truck Mounted Attenuators. Crash attenuator products designed for installation on the back of vehicles as a safety device for moving roadway operations.

Truck Mounted Attenuators: Crash attenuator products designed for installation on the back of vehicles as a safety device for moving roadway operations. Attenuators may be installed directly to truck body or installed on an integrally designed trailer.

960.48 Vegetation. Plant products used to establish (promote) healthy desirable vegetation and control erosion. Permanent seeding will prevent soil detachment by raindrop impacts, reduce sheet and rill erosion and stabilize slopes and channels.

Vegetation (Permanent): Perennial grass, forb, shrub and/or tree establishment that reduces wind, water or rain erosion. Permanent vegetation is long-lived and provides long-term stabilization; and may include mulch, compost, fertilizer and/or microorganisms or any combination.

Vegetation (Temporary): Annual grass, forb, or cover crop that is fast growing and establishes quickly to reduce wind and/or water (rain) erosion. Temporary vegetation is short-lived (one season), facilitates establishment of other perennial plants, and provides temporary cover and slope stabilization; and may or may not require mulch, compost, fertilizer and/or microorganisms or any combination.

Wetland Vegetation: Vegetation that is typically adapted for life in inundated or saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas.

960.49 Vegetation Control. Products used to prevent vegetative growth or control the extent of growth

Vegetation Control – Chemical: Various chemical products used to control or prevent vegetation.

Vegetation Control – Natural Fiber Mat: Various control systems incorporating natural fiber, designed for use in weed control and/or mulching in perennial beds.

Vegetation Control – Structural: Various systems designed to control vegetation, including geosynthetic mats, pavers, etc.

960.50 Wetland Reconstruction. Products specifically designed for Wetlands Mitigation.

Wetland Reconstruction: Wetland restoration involves renewing natural and historical wetlands that have been lost or degraded due to disturbance and reclaiming the functions and values as vital ecosystems.